

Highlights

Overview

This issue of the *Natural Gas Monthly* contains estimates of natural gas data through June 2000 for many data series at the national level. Estimates of natural gas prices are available through March for most series. Also, State-level data are available through March 2000.

Highlights of the most recent data estimates contained in this issue are:

- The amount of working gas in underground storage at the end of June 2000 is estimated to be 1,750 billion cubic feet, 8 percent lower than the average of 1,909 billion cubic feet for June during 1995-1999.
- During the first 6 months of 2000, consumption of natural gas increased substantially in the industrial sector, by 6 percent, while it fell in the residential sector and remained nearly level in the commercial sector.
- The average natural gas wellhead price continued to rise sharply during 2000. In June it reached \$3.58 per thousand cubic feet, 47 percent higher than the highest monthly price of 1999 which was \$2.44 per thousand cubic feet in November.

Supply

Dry natural gas production from January through June 2000 is relatively equal in volume to that of the same period during the past 2 years (less than 1 percent differences). Cumulative dry gas production for January-through-June 2000 is estimated to be 9,369 billion cubic feet (Table 1). While this is slightly higher than for the first half of 1999, the year 2000 is a leap year and has an extra day. The average daily rate of dry production during the first half of 2000 was 51.5 billion cubic feet per day, just below the average of 51.6 billion cubic feet per day in the first half of 1999 (Figure HI1) and 1 percent lower than that in the first half of 1998, 52.2 bil-

lion cubic feet per day. The daily production rate in each month of 2000 has been within 3 percent of the rate for the corresponding month in 1999.

Net imports of natural gas for the first half of 2000 are estimated to be 1,707 billion cubic feet (Table 2). The daily rate in 2000 of 9.4 billion cubic feet per day is 4 percent greater than in the first half of 1999 and 16 percent greater than in the first half of 1998. Supplies from the Sable Island Offshore Energy Project off the coast of Canada, which began operating in January, contributed to the increase in 2000. Net imports in each month of the first half of 2000 have ranged from 9.0 to 10.0 billion cubic feet per day.

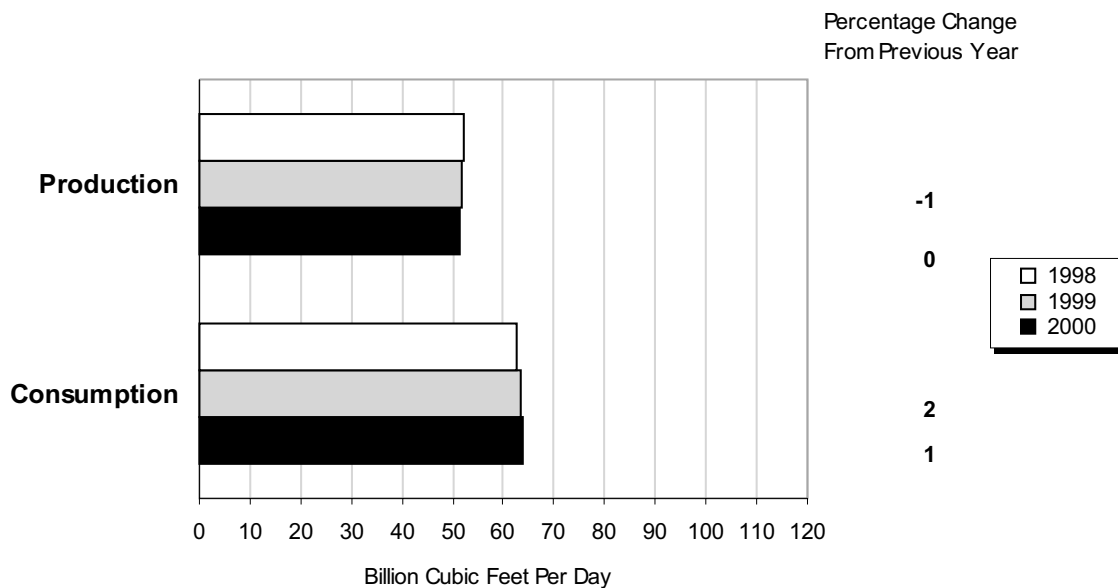
The amount of working gas in underground storage at the end of June 2000 is estimated to be 1,750 billion cubic feet (Table 10). While this is 19 percent lower than at the end of June 1999, it is only 8 percent lower than the average of 1,909 billion cubic feet for June during 1995-1999 (Figure HI2) and higher than the 1,520 billion cubic feet in storage at the end of June 1996.

End-Use Consumption

End-use consumption of natural gas through the first 6 months of 2000 is estimated to be 10,666 billion cubic feet or 58.6 billion cubic feet per day, about 1 percent above the daily rate for the first half of 1999 (Table 3). Consumption increased substantially in the industrial sector, by 6 percent, while it fell in the residential sector and remained nearly level in the commercial sector (Figure HI3).

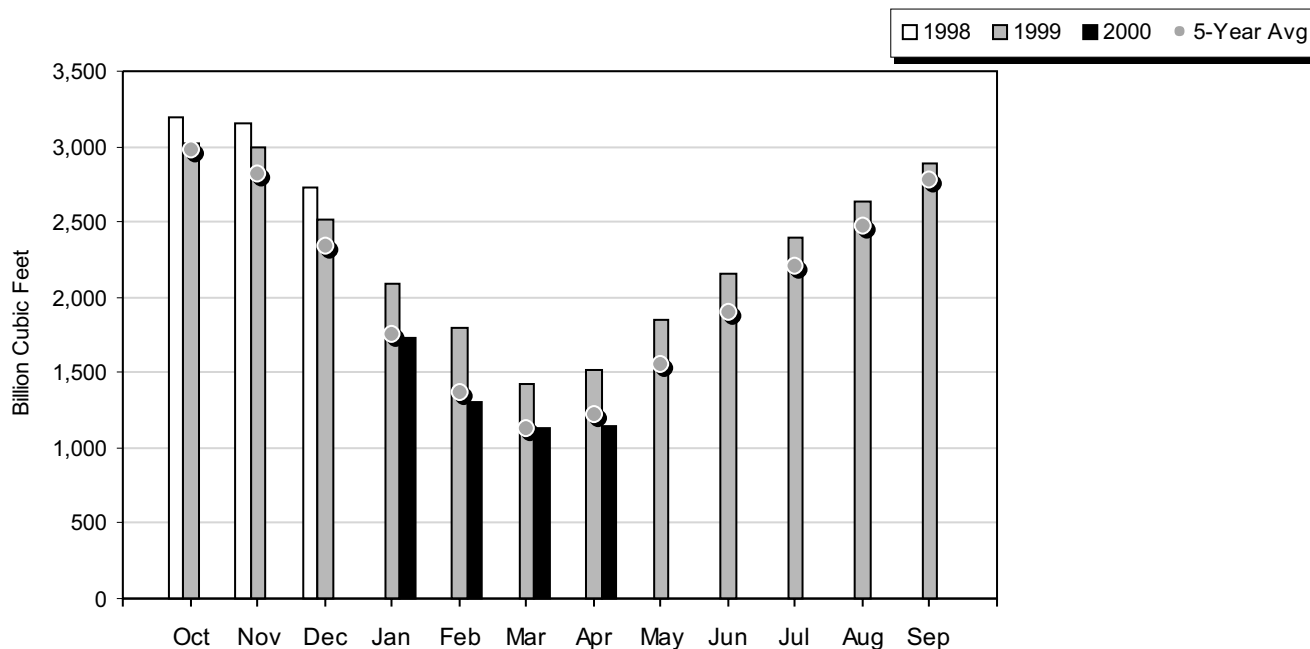
The residential and commercial sectors are highly responsive to weather-related space-heating requirements. Although there were cold periods during January and February of this year in some areas of the country, the first 3 months of 2000 were warmer than normal. There were 25 percent fewer heating degree days during the first quarter of 2000

Figure HI1. Average Daily Rate of Natural Gas Production and Consumption, January-June, 1998-2000



Source: Table 2.

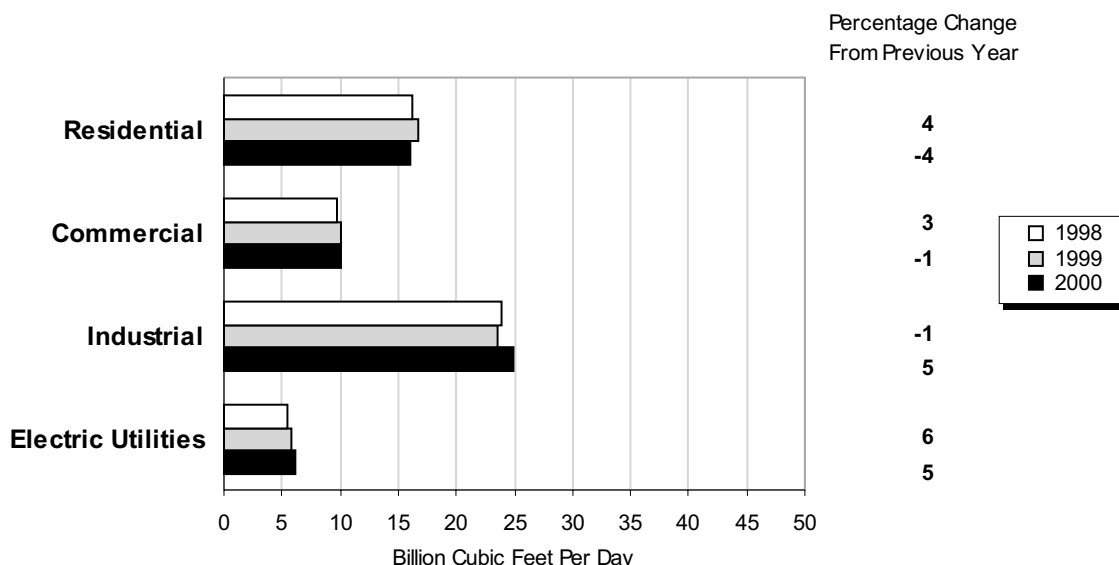
Figure HI2. Working Gas in Underground Storage in the United States, 1998-2000



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999 while the January average is calculated from January levels for 1996 to 2000. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Figure HI3. Average Daily Rate of Natural Gas Deliveries to Consumers, January-June, 1998-2000



Note: Electric utilities reflect deliveries for January-March.

Source: Table 3.

compared to the same period of 1999.¹ Cumulative residential consumption for January through June 2000 is estimated to be 2,924 billion cubic feet or 16.1 billion cubic feet per day, 4 percent lower than the daily rate for the same period in 1999. Consumption also declined in the commercial sector, although by less than 1 percent. Cumulative commercial consumption from January through June is estimated to be 10.0 billion cubic feet per day, compared with a daily rate of 10.1 billion cubic feet for the first half of 1999.

The average daily rate of industrial consumption of natural gas was 24.8 billion cubic feet for January through June 2000 compared with 23.6 billion cubic feet per day during the first 6 months of 1999, an increase of 5 percent. Beginning in February 2000, gas consumption in this sector rose in each month compared with the same month of 1999. The increase in industrial consumption may reflect increases in gas used in manufacturing processes as well as gas used by nonutility generators. As the restructuring of the electric utility industry proceeds, many previously regu-

lated generating plants have been sold to entities that are not regulated utilities. These facilities are classified as nonutility generators, and the gas that they consume is reported as industrial rather than electric utility consumption.

Data for the electric utility sector are available only through March 2000. Cumulative consumption in this sector climbed to 3.1 billion cubic feet per day, 6 percent above the daily rate of 2.9 billion cubic feet during the same period of 1999. This increase occurred despite rising wellhead prices in 2000, especially in February and March.

Prices

Beginning with this issue of the *Natural Gas Monthly*, the Energy Information Administration will provide more current estimates of wellhead prices. These estimates are: \$2.55 per thousand cubic feet for April 2000; \$2.76 per thousand cubic feet

1 Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130(2000/04) (Washington, DC, May 2000), Table 26.

for May 2000; \$3.58 per thousand cubic feet for June 2000; and \$2.61 per thousand cubic feet for January through June 2000. They appear in the footnotes in Table 4, in the Notes section. See Note 8 in Appendix A, Explanatory Notes, for a description of how the estimates are made.

Natural gas prices, both at the wellhead and those paid by end users, were running higher in the first quarter 2000 than in the first quarter 1999. The average wellhead price for the first quarter 2000 is estimated to be \$2.26 per thousand cubic feet, \$0.52 or 30 percent higher than in 1999 and \$0.28 or 14 percent higher than in 1998 (Figure HI4, Table 4).

The estimated residential price paid for natural gas in the first quarter 2000 is \$6.49 per thousand cubic feet, \$0.42 or 7 percent higher than in 1999. In the commercial sector, the estimated first quarter 2000 price² is \$5.34 per thousand cubic feet, \$0.26 or 5 percent higher than in 1999.

Higher prices led to somewhat higher expenditures for natural gas by residential users during the 1999-2000 heating season (November through March), even though consumption was somewhat lower. Heating degree days for the United States during the 1999-2000 heating season were 6 percent lower than during the 1998-1999 heating season, indicating a generally warmer winter. Residential consumption of natural gas during the 1999-2000 heating season was 3,164 billion cubic feet, 3 percent lower than in the previous heating season. Consumption in March 2000 (estimated at 536 billion cubic feet) was 19 percent lower than in March 1999, as heating degree days were 23 percent lower than in March 1999. Higher prices during the heating season months led to expenditures for natural gas of \$20.7 billion by the residential sector during the 1999-2000 heating sea-

son, 3 percent higher than during the 1998-1999 heating season (without adjusting for inflation).

The price paid for natural gas by industrial users in the first quarter 2000 is estimated to be \$3.35 per thousand cubic feet, \$0.37 or 12 percent above the level in the first quarter 1999. The prices paid by electric utilities are available only through February. The January-through-February average price is \$2.83 per thousand cubic feet, \$0.54 or 24 percent higher than in the first 2 months of 1999.

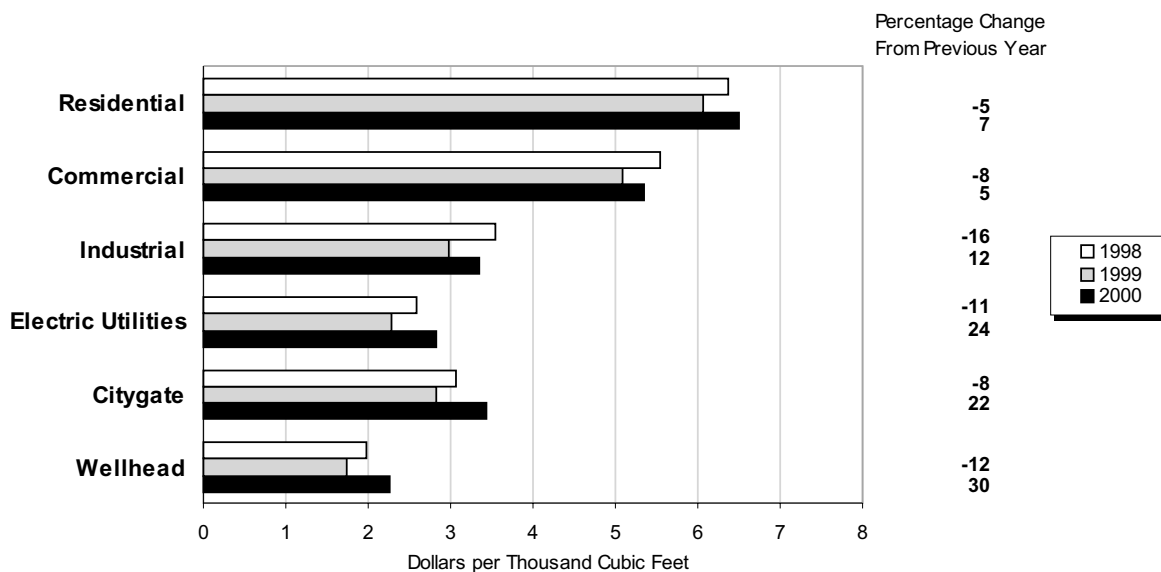
Natural gas prices at the Henry Hub, both on the spot market and on the New York Mercantile Exchange (NYMEX) futures market, generally rose from February 2000 through early May, then increased sharply through early June (Figure HI5). Trading during May 2000 on the futures contract for June 2000 delivery generally increased from a low of \$3.025 per million Btu on May 5 to a high of \$4.408 per million Btu on May 26, the closing date for the contract. Trading on the contract for July 2000 delivery settled at \$4.354 on May 30, the first day of trading as the near-month contract, and closed at \$4.369 per million Btu on June 28.

Day-to-day volatility increased during June as the settlement price ranged from a low of \$3.945 to a high of \$4.686 per million Btu. The high price was the highest settlement price ever recorded for the NYMEX at the Henry Hub for a near-month contract. Reasons for the rise in spot and futures prices thus far in 2000 include greater than average demand for gas to refill working gas in storage, high crude oil prices, increased demand as new gas-fired power generators come on line, and forecasts for warmer-than-normal summer temperatures that would increase the demand for natural gas for electricity generation to meet demand for air conditioning.³

2 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1999 they were 65 percent of commercial deliveries and only 17 percent of industrial deliveries (Table 4).

3 Energy Information Administration, *Natural Gas Weekly Market Update*. <http://www.eia.doe.gov> (July 3, 2000).

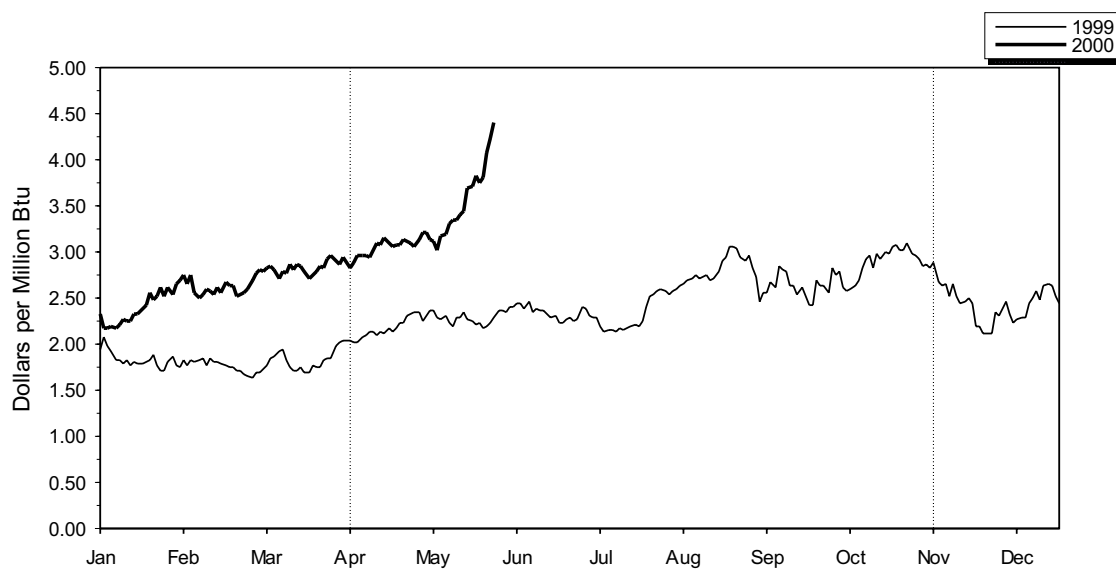
Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-March, 1998-2000



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices.

Source: Table 4.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the near-month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

